# Qingzhao Yu

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#### Education

# Ohio State University, Department of Statistics, 2002 - 2006

Ph.D. in Statistics, August 2006

M.S. in Statistics, March 2004

## Wuhan University, China, Business School, 1994 - 2001

M.A. in Management, June 2001

B.A. in Economics, June 1998

# Experience

#### Louisiana State University

Associate Professor, School of Public Health, Biostatistics, Jul. 2012-Present Assistant Professor, School of Public Health, Biostatistics, Sep. 2006-Jun. 2012

#### Ohio State University

Research Assistant, Department of Statistics, Jul.-Dec. 2005

Consultant, Statistical Consulting Service, Jan.-Jun. 2004, 2005

Research Assistant, Center for Survey Research, Sep. 2003-Aug. 2004

Teaching Assistant, Department of Statistics, Jan.-Aug. 2003, Oct.-Dec. 2004

#### Bank of Shanghai, Shanghai, China

Assistant Manager, Jul.-Dec. 2001

#### Research Interests

- Bayesian Modeling
- Computational Methods
- Genetic Analysis
- Human-Aided Machine Learning
- Spatial Statistics Analysis
- Survey Research

## **Teaching**

#### Louisiana State University

BIOS 6204: Statistical Theory I (Fall, 2012)

BIOS 6310: Sampling Methods (Fall, 2011)

BIOS 6102: Biostatistics II (Spring, 2011)

BIOS 6310: Applied Bayesian Analysis (Summer, 2010; Spring, 2012)

BIOS 6302: Longitudinal Data Analysis (Spring, 2010)

BIOS 6227: Statistical Programming and Numerical Method (Fall, 2008)

BIOS 6222: Biostatistics II (Spring, 2008)

BIOS Summer Workshop: Bayesian Data Analysis (Summer, 2008)

BIOS 6244: Analysis of Categorical Data in the Health Sciences (Fall, 2007; Spring 2009)

BIOS 6500: Multivariate Methods Lab (Spring, 2007)

BIOS 6298: Biostatistics Seminar (Spring, 2007, 2010; Fall, 2009)

## Ohio State University

STAT 145: Introduction to the Practice of Statistics (Winter, 2003)

STAT 245: Introduction to Statistical Analysis (Fall, 2004)

# Selected Publications and Manuscripts

- Yu, Q., Li, B., Fang, Z., and Peng, L., 2012 Model Guided Adaptive Design and Analysis in Computer Experiment. Statistical Analysis and Data Mining.
- Xu, Y., Yu, Q.\*, Scribner, R., Theall, K., Scribner, S., and Simonsen, N., 2012, Multi-level Spatiotemporal Change-point Models for Evaluating the Effect of an Alcohol Outlet Control Policy on Changes in Neighborhood Assaultive Violence Rates, Spatial and Spatio-temporal Epidemiology, 3(2), 121-128.
- Elliott, E. M., Cherry, K. E., Silva, J. L., Smitherman, E. M., Jazwinski, S. M., 2011, Yu, Q, and Volaufova, J., Working memory in the oldest-old: Evidence from output serial position curves. *Memory & Cognition*, 39(8), 1423-1434.
- Yu, Q., MacEachern, S. N. and Peruggia, M. 2011, Bayesian Synthesis: Combining Subjective Analyses, with an Application to Ozone Data. *The Annals of Applied Statistics*, 5(2B), 1678-1698.
- Yu, Q., Wu, X.C., Andrews, P., Mercante, D., Ranganath, P., Ajani, U., Qiao, B., and Wohler, B. 2011, Statistical Methods to Check Agreement between Two Coding Systems in the Absence of Double-Coded Data. JP Journal of Biostatistics, 6(1), 1-18.

- Yu, Q. 2010, Weighted Bagging A Modification of AdaBoost from the Perspective of Importance Sampling. *Journal of Applied Statistics*, 38(3), 451-463.
- Wu, X.C., Yu, Q., Andrews, P., Ranganath, P., Qiao, B., Ajani, U., Wohler, B., and Zhang, Z. 2011, Comparisons of Directly Coded SEER Summary Stage 2000 and Collaborative Staging Derived SEER Summary Stage 2000. *Journal of Registry Management*, 37(4), 137-140.
- Theall, K., Scribner, R., Stephanie Broyles, **Yu, Q.**, Jigar Chotalia, Simonsen, N., Schonlau, M., and Carlin, B., 2010, Impact of Small Group Size on Neighborhood Influences in Multilevel Models. Accepted by *Journal of Epidemiology and Community Health*.
- Scribner, R., Theall, K., Simonsen, N., Mason, K. and **Yu, Q.** 2009, Misspecification of the Effect of Race in Fixed Effects Models of Health Inequalities. *Social Science & Medicine*, 69, 1584-1591.
- Yu, Q., Li, B., Fang, Z. and Peng, L. 2009, An Adaptive Sampling Scheme Guided by BART with an Application to Predict Processor Performance. *The Canadian Journal of Statistics*, 38(1), 136-152.
- Li, B. and Yu, Q. 2009, Robust and Sparse Bridge Regression. Statistics and Its Interface, 2, 481-491.
- Li, B., Sanderlin, R., Melanson, R. and **Yu, Q.** 2009, Spatio-Temporal Analysis of A Plant Disease in A Non-uniform Crop: A Monte Carlo Approach. *Journal of Applied Statistics*, 38(1), 175-182.
- Yu, Q., Li, B. and Scribner, R. 2009, Hierarchical Additive Modeling of Nonlinear Association with Spatial Correlations - An Application to related alcohol outlet destruction and changes in neighborhood rates of assaultive violence. Statistics in Medicine, 28(14), 1896-1912.
- Li, B., Yu, Q. 2008, Feature Extraction for Classification of Functional Data, Computational Statistics & Data Analysis, 52(10), 4790-4800.
- Yu, Q., Scribner, R., Carlin, B., Theall, K., Simonsen, N., Ghosh-Dastidar, B., Cohen, D., Mason, K. 2008, Multilevel Spatio-temporal Dual Changepoint Models for Relating Alcohol Outlet Destruction and Changes in Neighborhood Rates of Assaultive Violence, *Geospatial Health*, 2(2), 161-172.
- Yu, Q., Stasny, E. A. and Li, B. 2008, Bayesian Models to Adjust for Response Bias in Survey Data: An Example in Estimating Rape and Domestic Violence Rates from the NCVS, *Annals of Applied Statistics*, 2, 665-686.

#### Grants

- PI, National Cancer Institute HHSN261200900015C: Data Quality Control through Nonlinear Association Analysis of Unknown Staged Cancer Cases. June, 2011—December, 2012.
- Biostatistician, HHSN261201000030: Surveillance, Epidemiology & End Results (SEER) Expansion Program. 2010-2017.
- Co-Investigator, National Institute of Alcohol Abuse and Alcoholism Fund 1 RC1 AA019329-01: Comparing the Effectiveness of City Policy and Structure in Health Disparities, PI Richard Scribner. 2009-2011.
- PI, DHH/OPH/EPI, CFMS 671761: Fishing Tissue HG Concentration Analysis. PI Qingzhao Yu. 2008-2009.
- Co-PI, Healthy Aging, PI Michal Jazwinski. Jan. 2009 June 2011.
- Statistician, National Institute of Alcohol Abuse and Alcoholism Fund 5 RO1 AA013810-03: Neighborhood Environment and Alcohol Health Disparities. PI Richard Scribner, LSUHSC-NO. 2006 2008.
- Research Associate, National Science Foundation, Grant Number SES-0437251: Hierarchical Bayesian Methods in Consumer Behavior. P.I. Angela Dean et al., The Ohio State University, 2005 2006.
- Research Associate, National Institute of Justice, Office of Justice Programs, U.S. Department of Justice, award number 93-IJ-CX-0050: Adjusting the National Crime Survey's Estimates of Rape and Domestic Violence for 'Gag' Factors in Reporting. PI E.A. Stasny and A.L. Coker. 2004 2005.

#### **Scholarly Presentations**

- Cherry, KE, Golob, E, Elliott, EM, Brown, JS, Yu, Q, Volaufova, J, and Jazwinski, SM, "Strategic Encoding and Retrieval Processes in Verbal Recall among Oldest-Old Adults", The Gerontological Society of America's 64th Annual Scientific Meeting, Boston, MA, November, 2011.
- Bonanno, L, Paige, J, Garbee, D, Rusnak, V, Barrier, K, Kozmenko, L, Yu, Q, Cefalu, J, and Nelson, K, "Effectiveness of Teamwork and Communication in a Critical Care Code Scenario Using Interdisciplinary High-Fidelity Human Patient Simulation with Students from Four Professional Programs", The 6th International Conference on Interdisciplinary Social Sciences, July, 2011.
- Yu, Q, Wu, XC, Hsieh, MC, Andrews, PA, Wohler, B, Huang, B, Qiao, B, Jemal, A, and Ajani, U, "Cancer Data Quality Control by Proportion of Unknown Stage", NAACCR 2011 Annual conference, Louisville, Kentucky, June 2011.

- Huang, B, Wohler, B, Wu, XC, Yu, Q, Qiao, B, Andrews, PA, Jemal, A, Hsieh, MC, and Shelton, B, "Benign/Borderline Intracranial and Central Nervous System Tumors in the CINA Deluxe Data", NAACCR 2011 Annual conference, Louisville, Kentucky, June 2011.
- Wohler, B, Qiao, B, Schymura M, Wu, XC, Andrews, PA, Hsieh, MC, Huang, B, Yu, Q, Ajani, U, and Jemal, A, "Data quality of surgery and radiation for four major cancer sites in CINA Deluxe", NAACCR 2011 Annual conference, Louisville, Kentucky, June 2011.
- Wohler, B, Wu, XC, Andrews, PA, Huang, B, Qiao, B, Hsieh, MC, Ajani, U, Jemal, A, and Yu, Q, "Data quality of Tumor Size and Depth for Breast cancer and Melanoma in CINA Deluxe", NAACCR 2011 Annual conference, Louisville, Kentucky, June 2011.
- Paige, J, Garbee, D, Kozmenko, V, Yu, Q, Kozmenko, L, Bonanno, L, and Swartz, W, "Behavioral Impact of Inter-Professional Student Operating Room Team Training using High Fidelity Simulation", Annual ACS Consortium Meeting, Chicago, April 2011.
- Wu, XC, Yu, Q, Andrews, PA, Ranganath, P, Qiao, B, Ajani, U, Wohler B. and Zhang, Z., "Comparisons of Directly Coded SEER Summary Stage 2000 and Collaborative Staging Derived SEER Summary Stage 2000", NAACCR 2010 Annual Conference, Quebec, Canada, June 2010.
- Delgado, B, Welsh D, Jazwinski D, and Yu Q, "Defining Impairment In The Elderly Using The Forced Expiratory Volume In 1 Second/Forced Vital Capacity Ratio", SAFMR/SSCI Trainee Research Award Winner, 2010 Southern Regional Meeting, New Orleans, LA, Feb 2010.
- "An Adaptive Sampling Scheme Guided by BART With an Application to Predict Processor Performance", Biostatistics Seminar, New Orleans, LA, Feb. 2010.
- Elliott, E. M., Cherry, K. E., Silva, J. L., Smitherman, E. M., Jazwinski, S. M., Volaufova, J., & Yu, Q, "Working memory in the oldest-old: Evidence from output serial position curves", Poster presented at the 117th Annual American Psychological Association Convention, Toronto, Aug 2009.
- Wu, XC, Chen, VW, Andrews, PA, Yu, Q, "Effect of Changes in use of Screening Modalities on Subsite-specific Stage of Colorectal Cancers in the United States", Annual Meeting of International Association of Cancer Registries (IACR), New Orleans, June, 2009.
- "AdaBoost from the Perspective of Importance Sampling", *Joint Statistical Meetings*, Washington D.C., Aug. 2009.

- "Hierarchical Additive Modeling of Nonlinear Association with Spatial Correlations An Application to related alcohol outlet destruction and changes in neighborhood rates of assaultive violence", ENAR, San Antonio, TX, Mar. 2009.
- "Hierarchical Additive Modeling of Nonlinear Association with Spatial Correlations An Application to related alcohol outlet destruction and changes in neighborhood rates of assaultive violence", *Biostats Seminar*, New Orleans, LA, Feb. 2009.
- "Adaptive Experimental Design", *Prostate Cancer Group Meetings*, New Orleans, Sep. 2008.
- "Multilevel Spatiotemporal Dual Changepoint Models for Relating Alcohol Outlet Destruction and Changes in Neighborhood Rates of Assaultive Violence", 24th Annual Louisiana Remote Sensing & GIS Workshop, New Orleans, Apr. 2008.
- "Multilevel Spatiotemporal Dual Changepoint Models for Relating Alcohol Outlet Destruction and Changes in Neighborhood Rates of Assaultive Violence", *Bayesian Biostatistics Conference*, MD Anderson Cancer Center, Jan. 2008.
- "Bayesian Synthesis", 2008 Winter Bayesian Workshop, University of Florida, Jan. 2008.
- "Feature Extraction for Classification of Functional Data", *The Joint Statistical Meetings*, Salt Lake City, Aug. 2007.
- "Bayesian Synthesis", Tenth Meeting of New Researchers in Statistics and Probability, Salt Lake City, Jul. 2007.
- "Development of a Bayesian Spatio-Temporal Model to Assess Trends in Assaultive Violence at the Census Tract Level", 30th Annual Scientific Meeting of the Research Society on Alcoholism, Chicago, Jul. 2007.
- "Feature Extraction for Functional Data in Classification", Fourth Annual Mid-South Conference on Computational Biology and Bioinformatics, New Orleans, Feb. 2007.
- "What People Do As Biostatisticians", Lousiana State University Mathematics Club, Baton Rouge, NOV. 2006.
- "Bayesian Models to Adjust for Response Bias in Survey Data: An Example in Estimating Rape and Domestic Violence from the NCVS", *Louisiana State University Health Science Center Biostatistics Seminar*, New Orleans, Oct. 2006.
- "Bayesian Synthesis", The Joint Statistical Meetings, Seattle, Aug. 2006.
- "Bayesian Synthesis", Invited Talk at *MD Anderson Cancer Center*, Huston Mar. 2006.

- "Data-Splitting Models for O3 Data", The Eighth Workshop for Case Studies in Bayesian Statistics, Pittsburg, Sep. 2005.
- "Bayesian Models to Adjust for Response Bias in Survey Data: An Example in Estimating Rape and Domestic Violence from the NCVS", *The Joint Statistical Meetings*, Minneapolis, Aug. 2005.
- "A Bayesian Case Study on Kentucky Derby Data", Seminars in Quantitative Studies in Consumer Behavior Study Group, Columbus, Apr. 2005.

# Honors and Awards

- Travel Award to attend and present at the 2011 McMski III conference, 2011.
- Travel Award to attend the 2008 ENAR Workshop for Junior Researchers, 2008.
- Travel Award to attend the 2008 Bayesian Biostatistics Conference and give a presentation, 2008.
- NSF supported Travel Award to attend the 2008 Winter Bayesian Workshop and give a presentation, 2008.
- Travel Award to attend the 10th Meeting of New Researchers in Statistics and Probabilities and give a presentation, 2007.
- Winner, 2006 Student Paper Competition, ASA Section on Bayesian Statistical Science.
- Winner, 2005 Student Paper Competition, ASA Social Statistics, Government Statistics and Survey Research Methods Sections.
- Graduate Summer Research Fellowship, Center for Survey Research, The Ohio State University, 2004.
- Travel Award for 2004 Joint Statistical Meetings, ASA Survey Research Methods Section.
- University Fellowship, The Ohio State University, Jan.-Dec. 2002.

# **Activity and Committee**

- Review Editor, Frontiers in Statistical Genetics and Methodology (since November, 2010).
- Data Assessment Workshop, NAACCR Data Use and Research Committee (DURC) (MAR. 2010 - date).
- Secretary/Treasurer, American Statistical Association Louisiana Chapter, 2010-2011.
- Co-organizer, American Statistical Association Louisiana Chapter Spring Meeting, New Orleans, LA, April 2010.

- Delegator, Biostatistics Program, LSUHSC School of Public Health Faculty Assembly Meeting, Jan. 2010 date.
- Volunteer, ENAR 2010 Spring Meeting, New Orleans, LA, Mar. 2010.
- Session Chair, Section on Bayesian Statistical Science, The Joint Statistical Meetings, Washington DC, Aug. 2009.
- President, American Statistical Association Louisiana Chapter, 2009-2010.
- Co-organizer, American Statistical Association Louisiana Chapter Fall Meeting, Baton Rouge, LA, Dec. 2009.
- Co-organizer, American Statistical Association Louisiana Chapter Spring Meeting, Lafayette, LA, May 2009.
- Comparisons of Directly Coded SEER Summary Stage 2000 and Collaborative Staging Derived SEER Summary Stage 2000, NAACCR Data Use and Research Committee (DURC) (Feb. 2008 date).
- Host a Bayesian Workshop, School of Public Health Louisiana State University Health Sciences Center, 2008 Summer.
- Biostatistics PhD Program Qualify Exam Committee, School of Public Health Louisiana State University Health Sciences Center, 2008.
- Co-organizer, American Statistical Association Louisiana Chapter Fall Meeting, New Orleans, LA, Dec. 2008.
- Vice President, American Statistical Association Louisiana Chapter, 2008-2009.
- Representative, American Statistical Association Louisiana Chapter, 2008-2010.
- Evaluation Committee, School of Public Health Louisiana State University Health Sciences Center, 2007-present.
- Epidemiology Task Forces Committee, School of Public Health Louisiana State University Health Sciences Center, 2007-2008.
- Session Chair, Section on Bayesian Statistical Science, *The Joint Statistical Meetings*, Seattle, Aug. 2006.

#### Professional Memberships and Certifications

- American Statistical Association
- Institute of Mathematical Statistics
- International Society for Bayesian Analysis
- Certified Public Accountant in China, since 1999